

### **Listing of Claims:**

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[ ]].

Claims 1-26 (canceled)

27. (Currently amended) A multi-element, modular building system for constructing a substantially plastic building, comprising:

plastic modular building components, including ~~panels and connector elements configured to interconnect the modular building components,~~ **columns and rafter components, at least one of the rafter components being configured for mounting above a column and for interlocking other plastic frame members, the rafter component having internal diagonal rigidifying support structure, wherein the rafter component has four substantially orthogonal sides and a plurality of external hook structures for interconnecting frame members to at least three of the sides,**

wherein the modular components are extruded from a polymer material, and wherein the ~~connector elements have hook-like structures~~ **are** configured to slide or snap into interlocking engagement with corresponding hook-like structures on other building components to permit relative rotational and translational motion between building components.

28. (Previously presented) The modular building system of claim 27, wherein the connector elements are in interlocking engagement without the need for additional fasteners.

29. (Previously presented) The modular building system of claim 27, wherein the overall configuration of the building shifts in response to a change in ambient temperature and/or externally applied load such that the building increases or decreases in size.

30. (Previously presented) The modular building system of claim 27, wherein, when the ambient temperature changes and/or an external load is applied, the relative positions between the interconnected modular components change and the building as a whole undergoes effective, reversible, bidirectional enlargement and shrinking.

31. (Previously presented) The modular building system of claim 27, wherein the connector elements respond adaptively, selectively, and dynamically with respect to an externally applied load to create load bearing paths through the building between the point of application of the externally applied load and the ground.

32. (Previously presented) The modular building system of claim 31, wherein the load bearing paths through the building differ according to the nature, size, and direction of the externally applied load.

33. (Previously presented) The modular building system of claim 27, wherein the interlocking engagement between the connector elements increases in certain regions of the building when an external load is applied.

34. (Previously presented) The modular building system of claim 27, wherein, when the ambient temperature changes and/or an external load is applied,

interconnected modular building components undergo dwell periods of load transmission during which those components are not loaded.

35. (Previously presented) The modular building system of claim 27, wherein the modular building components include an internal way and chase structure adapted to receive selected utility-carrying means.

36. (Previously presented) The modular building system of claim 27, wherein the building includes an air-flow venturi system to enable air to flow into and out of the building.

37. (Previously presented) The modular building system of claim 27, further comprising a water reservoir structure, integrated with and located adjacent a foundation of the building in order to act as a source of water for a fire suppression system, to act as a heat sink to help control the temperature in regions of the building and/or to stabilize the foundation weight of the building if the building is substantially supported on the ground and has no significant ground penetrating foundation structure.

38. (Previously presented) The modular building system of claim 27, further comprising a two part ground-engaging foundation structure which generally increases in lateral dimensions from the upper to the lower regions of the foundation structure whereby one of the parts comprises a solid core and the other of the parts comprises a jacketing structure that is arranged on opposite sides of the core and made from a different material to the core.

39. (Previously presented) The modular building system of claim 38, wherein the core is formed of concrete that has been poured into a space defined by the jacketing structure and the jacketing structure is formed from plate portions.

40. (Previously presented) The modular building system of claim 39, wherein the plate portions are extruded from a polymer material.

41. (Previously presented) The modular building system of claim 38, wherein the foundation structure includes an elongate vertically adjustable foot structure with a broad, and configurationally-adaptable footing expanse which is configured to be selectively engageable with a ground protrusion.

42. (Previously presented) The modular building system of claim 41, wherein the footing expanse comprises a downwardly facing cluster of elongate, elastomeric tentacles.

43. (Previously presented) The modular building system of claim 38, wherein the foundation structure includes elongate vertically adjustable components, employed within the foundation structure to level the foundation structure.

44. (Previously presented) The modular building system of claim 27, wherein the modular building components include panel structures arranged to carry a load under tension.

45. (Previously presented) The modular building system of claim 27, wherein the modular building components include panel structures that can be moved or interchanged to change the effective character of a wall and/or roof expanse of the building.

46. (Previously presented) The modular building system of claim 27, wherein the modular building components include panel structures floatingly connected to a frame structure using the connector elements such that an externally applied load may be transmitted between the panel structures and frame structure in an adaptive and intermittent manner according to the nature, size, and direction of the externally applied load.

47-51. (Cancelled)

52. (New) The modular building system of claim 27, wherein the rafter component has a plurality of external hook structures for interconnecting frame members to at least four of the sides.

53. (New) The modular building system of claim 27, wherein the rafter component has two inward hook structures on a top side, and  
a cap structure for coupling each of the inward hook structures to a corresponding hook structure on another frame member.

54. (New) The modular building system of claim 27, wherein the rafter component has an internal criss-cross structure.

55. (New) The modular building system of claim 27 further comprising  
a capping member interconnecting the rafter component to a corresponding column.